

### **ABSTRACT**

In a photosensitive apparatus having photodiodes, such as a photosensor chip used in digital office equipment, a "fat zero" initial bias is injected on the photodiode. With every cycle of operation, a first fat zero is placed on the photodiode and then sampled. Then, a second fat zero is placed on the photodiode just before the integration of a light signal from an image being recorded. The light signal plus the second fat zero is transferred out of the photodiode and the sampled signal is subtracted therefrom, leaving only the light signal. The system obviates both fixed-pattern and some thermal noise within the apparatus.